IN THE CLAIMS

Claims 1–114 (Cancelled)

Claim 115 (New) A semiconductor structure comprising:

- a) a monocrystalline Group IV substrate:
- b) a layer of amorphous oxide of Group IV in contact with said substrate;
- c) a monocrystalline metal oxide and/or metal nitride layer overlying the amorphous layer;
- d) a metal or metal oxide capping layer in contact with said monocrystalline metal oxide and/or metal nitride layer;
- e) a compound semiconductor template layer in contact with said capping layer; and
- f) a monocrystalline compound semiconductor layer in contact with said template layer.

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